including program instructions to implement various operations which may be performed by a computer. The media may also include, alone or in combination with the program instructions, data files, data structures, and the like. The program instructions recorded on the media may be those specially designed and constructed for the purposes of the exemplary embodiments, or they may be of the well-known kind and available to those having skill in the computer software arts. Examples of non-transitory computer-readable media include magnetic media such as hard disks, floppy disks, and magnetic tape; optical media such as CD ROM discs and DVDs; magneto-optical media such as optical discs; and hardware devices that are specially configured to store and perform program instructions, such as read-only memory (ROM), random access memory (RAM), flash memory, and the like. The media may be transfer media such as optical lines, metal lines, or waveguides including a carrier wave for transmitting a signal designating the program command and the data construction. Examples of program instructions include both machine code, such as code produced by a compiler, and files containing higher level code that may be executed by the computer using an interpreter. The described hardware devices may be configured to act as one or more software modules in order to perform the operations of the above-described exemplary embodiments, or vice versa.

[0105] The foregoing exemplary embodiments and advantages are merely exemplary and are not to be construed as limiting. The present teaching can be readily applied to other types of apparatuses. Also, the description of the exemplary embodiments is intended to be illustrative, and not to limit the scope of the claims, and many alternatives, modifications, and variations will be apparent to those skilled in the art.

What is claimed is:

1. A method of recognizing a motion of an object, the method comprising:

receiving event signals from a vision sensor configured to sense the motion;

storing, in an event map, first time information indicating a time at which intensity of light corresponding to the event signals changes;

generating an image based on second time information corresponding to a predetermined time range among the first time information; and

recognizing the motion of the object based on the image.

2. The method of claim **1**, wherein the generating the image comprises,

generating a first image comprising time information corresponding to a first time range among the first time information and generating a second image comprising time information corresponding to a second time range among the first time information, the second time range being different from the first time range.

3. The method of claim **2**, wherein the recognizing the motion comprises,

determining context information based on the first image and recognizing the motion of the object in the second image based on the context information.

4. The method of claim **2**, wherein the first time range is wider than the second time range.

5. The method of claim **2**, wherein one end of the first time range and one end of the second time range correspond to an identical point in time.

6. The method of claim **1**, wherein the recognizing the motion of the object comprises recognizing the motion of the object from the image based on a nerve network.

7. The method of claim **1**, wherein the event map comprises a two-dimensional (2D) map corresponding to the vision sensor and comprises time information in which most recently generated changes in intensity of light correspond to the event signals.

8. The method of claim **1**, wherein the event map comprises a three-dimensional (3D) map generated by adding a time axis to the 2D map corresponding to the vision sensor and comprises a time information history.

9. The method of claim **1**, wherein the vision sensor comprises an event-based vision sensor configured to generate at least one event signal in response to an event in which light received from the object is asynchronously changed.

10. The method of claim **1**, wherein the first time information is information of a time at which the event signals are received from the vision sensor or information of a time at which the event signals are generated by the vision sensor.

11. A non-transitory computer-readable storage medium storing a program that is executable by a computer to perform the method of claim **1**.

12. A device for recognizing a motion of an object, the device comprising:

a vision sensor configured to sense the motion and generate at least one event signal based on the sensed motion; and

a processor configured to store, in an event map, first time information indicating a time at which intensity of light corresponding to the at least event signal is generated, generate an image based on second time information corresponding to a predetermined time range among the first time information, and recognize the motion of the object based on the image.

13. The device of claim **12**, wherein the processor is configured to generate a first image comprising time information corresponding to a first time range among the first time information and generate a second image comprising time information corresponding to a second time range among the time information, the second time range being different from the first time range.

14. The device of claim **13**, wherein the processor is configured to determine context information based on the first image and recognize the motion of the object in the second image based on the context information.

15. The device of claim **13**, wherein the first time range is wider than the second time range.

16. The device of claim **13**, wherein one end of the first time range and one end of the second time range correspond to an identical point in time.

17. The device of claim **12**, wherein the processor is configured to recognize the motion of the object from the image based on a nerve network.

18. The device of claim **12**, wherein the event map comprises a two-dimensional (2D) map corresponding to the vision sensor and comprises time information in which most recently generated changes in intensity of light correspond to the event signals.

19. The device of claim **12**, wherein the event map comprises a three-dimensional (3D) map generated by adding a time axis to the 2D map corresponding to the vision sensor and comprises a time information history.